Educational Considerations

Volume 23 | Number 2 Article 4

4-1-1996

Technology Planning

Deborah S. Dunbar

Planning for technology is a crucial component of success in integrating technology into school environments. A six step outline is provided to help school administrators through this complex, critical process.

Technology Planning

Deborah S. Dunbar

While the promise of technology generates excitement and enthusiasm among educators, we are all aware of countless stories about the difficulty of implementing broad-based technology programs into our schools. Stories of outdated equipment stockpiled in closets, inadequate staff training, a lack of technical support, and disillusioned teachers and administrators are common. Whether schools are urban or rural, public or private, when it comes to technology one thing is certain: it is essential to have a vision and a strategic plan for turning that vision into reality.

Why plan for technology?

Strategic planning means skillful planning. It means integrating short-term plans with long-term objectives. It means putting your school district in its most advantageous position for achieving overall results. Strategic planning is a process for answering three basic questions: Where do you want to go? How are you going to get there? and How will you know when you've arrived?

Many technology plans focus on hardware and software selection and fail to present a strategic, comprehensive view of the technology-supported transformation of teaching and learning. Thus, a technology plan must be closely aligned with an overall strategic plan for the school district. This allows specific action plans to be developed annually that fit with the strategic direction of the organization.

Philip J. Brody (1995) emphasizes that it is important to understand the four basic principles listed below, as they directly or indirectly color virtually every element related to technology planning:

1. A technology plan must meet the needs of the school district, not the planner. Too often, we lose sight of this, charging ahead, oblivious to the needs the plan must meet.
2. Planning may be a useful exercise in many respects, but unless it leads to concrete action, it will remain just that—an exercise.
3. A plan must be more than a wish list or an opportunity to demonstrate one's cleverness and ingenuity. Although such an approach may impress some, plans that do not accurately assess and take into account the realities, strengths, and limitations of the environment rarely succeed.
4. It is easier to make basic changes and adaptations early in the planning process, before individuals or groups have become committed to a particular course of action.

Strategic planning for technology sets program performance goals and evaluation criteria. It guides the activities and relationships among personnel. It establishes a shared vision of what the school district ought to be doing and how it will carry out its mission.

What is involved in the process of technology planning?

Lumley and Bailey (1994) have developed a practical yet powerful model for use in the technology planning process. Their six-step model guides a district team through well-organized steps for planning:

Step 1: Organizing and Empowering a District Technology Planning Team

This step offers suggestions and tips for identifying and training the school district technology planning team. Since many instructional and administrative issues will be dealt with, they recommend that a broad cross section of people be represented on the planning team. Teachers, administrators, parents, business and industry representatives, community members, school support staff are all potentially valuable members of a district planning team.

Step 2: Prepare the Planning Team for the Study

Lumley and Bailey suggest that in order for school district technology planning teams to make informed and wise decisions, professional development is necessary for all players. Team members must become familiar with basic terminology, emerging technologies, and appropriate applications for schools.

Step 3: Assessing Current State of Technology in District

The third step for the planning committee involves conducting needs assessments or audits that pull together all current technology information in the district at the present time. What technologies are currently being used? What hardware and software are available? What are the current staff development needs? What opportunities are being provided?

Step 4: Develop Guiding Documents for Technology

Three guiding documents form the starting point for a technology plan:

* A philosophy statement	identifies ideas, values, opinions
* A mission statement	encapsulates the longer philosophy statement; communicates to all publics about the potential of technology and learning
* Series of technology	identifies desired student goal statements outcomes

Step 5: Develop the Long-Range Technology Plan

Lumley and Bailey indicate that developing the long-range technology plan comprises the major task of the planning team in terms of time and effort. Generally speaking, the final plan will facilitate the organization of the district's human, material, time, physical, and financial resources and provide a focus and direction for all stake holders in the district.

Step 6: Implement and Institutionalize the Technology Plan

Elements of this step include the approval of the technology plan by the school board, and implementation of ongoing activities that involve district staff, parents, students, business and community members.

Deborah Dunbar is Director of Technology, Media & Instruction at the Gratiot–Isabella Regional Service District, Ithaca, MI.

What happens after the plan is adopted?

The long-term health of a district's technology plan will never be secured through a day-at-a-time administration. There must be an overall, ongoing process whereby the plan is monitored, updated, and adjusted to reflect changes in the operating environment. A technology plan is no guarantee of success or organizational well-being, but without one, well-being will surely elude even the most well intentioned school district.

What are the elements of a broad-based comprehensive technology plan?

The following checklist may be helpful in providing a road map to the items that should be included in a school district's technology plan:

Guiding documents: Philosophy, Mission, and Goal Statements

Documentation linking the technology plan with the district's overall strategic plan

Action plans:

1. Equipment/Infrastructure
   - *network design
   - *hardware
   - *electronic mail
   - *telecommunications/ Internet access
   - *interactive television
   - *satellite
   - *phone system/fax
2. Administrative Applications
   - *information processing
   - *student information financial management
   - *personnel management
   - *inventory and fixed assets
   - *food services
   - *transportation
   - *special education
3. Curriculum Development/ Instructional Management
   - *curriculum database
   - *learning management
   - *instructional resources
   - *test item banks
   - *testing management
   - *statistical data analysis
4. Library/Media
   - *online services for students
   - *CD ROM reference materials
   - *acquisitions cataloging
   - *circulation
   - *information referral file
   - *online catalog
   - *serial control
5. Staff Development
   - *awareness
   - *basic skills
   - *district standards
   - *integrating technology into curriculum
6. Technical Support
   - *building-level support
   - *district-wide troubleshooting
   - *maintenance contracts
   - *in-house repairs/vendor repairs
7. Funding Sources/ Technology Budget
   - *district commitment
   - *building/site-based funds
   - *federal sources
   - *state sources
   - *local sources
8. Communications & Public Relations
   - *community outreach
   - *media plan
   - *building-level activities/ demonstrations
9. Evaluation/Review of Plan
   - *continuous assessment & monitoring
   - *annual review and update

A strategic plan for technology should be based on the fiscal and systemic realities of each school district, rather than serving as a dream list of wants and perceived needs. A district leadership team should continuously monitor implementation, assigning action plan tasks broadly across the district to ensure a shared step-by-step approach. Teachers, administrators, students, parents, and members of the business community should all participate in both the planning and implementation process. Technology planning is not a process to be left in the hands of a few top managers, but needs to be done on a systemic, district-wide basis. Together, stake holders can work for continuous quality improvement of the school district . . . successful integration of technology plays a key role.

References

1. Lumley, D. & Bailey, G. D. (1994). *Planning for technology: A guidebook for School Administrators.* Scholastic: New York.
2. Brody, P. J. (1995). *Technology planning and management handbook: A guide for school district educational technology leaders.* Educational Technology Publications: Englewood Cliffs, NJ.

https://newprairiepress.org/edconsiderations/vol23/iss2/4
DOI: 10.4148/0146-9282.1426